

USAWC STRATEGY RESEARCH PROJECT

THE NEED TO DEVELOP A NATIONAL HEALTH
STRATEGY - A REPORT ON THE INDUSTRY

by

Lieutenant Colonel Harry B. Williams
United States Army

Professor Larry Godfrey
Project Advisor

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U.S. Army War College
Carlisle Barracks, Pennsylvania 17013

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ABSTRACT

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The quality of health care in terms of treatment, system responsiveness, and health inequalities among the population in the United States is not commensurate with its cost. Although some argue that the United States can claim a quality of health care among the highest in the world, costs in fact are soaring out of proportion to the quality of care provided to the population as a whole. Government and private industry spending on health care threatens an impending national fiscal crisis as Americans age but live longer with chronic diseases while engaging in unhealthy lifestyles that cause problems such as obesity. The U.S. must control costs while ensuring broad access to high quality care. Development now of a National Health Strategy provides the best chance to produce the needed fundamental change in time to avert approaching fiscal disaster.

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THE NEED TO DEVELOP A NATIONAL HEALTH STRATEGY - A REPORT ON THE INDUSTRY

There is no greater threat to America's continued economic security than the current state of our health care delivery system.

— House Majority Leader Tom DeLay (R-Texas)

The way we finance health care is so seriously flawed that if we fail to fix it, we face a fiscal disaster . . . The present system is unsustainable. The only question is whether we will master the change or it will master us.

— Senator Hillary Rodham Clinton (D-New York).

The quality of health care in terms of treatment, system responsiveness, and health inequalities among the population in the United States is not commensurate with its cost. Measured on a per capita basis, U.S. health care costs currently constitute 14.9% of Gross Domestic Product, more than any other country in the world, and will likely grow to 18.4% by 2013.¹ Yet, according to World Health Organization statistics, the U.S. ranks 37 out of 191 countries in performance as measured by overall level of population health, system responsiveness, health inequalities or disparities among the population, and distribution of financial burdens.² Americans, for example, experience a higher rate of obesity and slightly lower life expectancies than citizens of Japan, Iceland, Sweden and Canada.³ Moreover, "Despite the incredible investment America continues to make in health care, an astounding 15% of Americans lack health care coverage altogether."⁴ Although some argue that the United States can claim a quality of health care among the highest in the world, costs in fact are soaring out of proportion to the quality of care provided to the population as a whole.⁵ As pointed out in the above quotes by House Majority Leader Tom Delay and by Senator Hillary Rodham Clinton, the national security implications are ominous.

This Strategy Research Project reveals several reasons for the high cost and incommensurate quality of American health care. Additionally, it describes the structure of the health care industry, its current condition, industry challenges, short and long term outlook, and concludes with some suggestions for appropriate governmental roles and goals in ways that might mitigate the developing "fiscal disaster." The following are four trends are of primary concern and deserve the immediate attention of our senior health care officials, U.S. policy makers and the President of the United States:

- Rising costs and implications for the domestic economy,
- The incline of medical malpractice lawsuits,
- Emergence and rapid spread of infectious diseases associated with globalization, and

- Associated issues of incident management and public health.

This Strategy Research Project also summarizes the following three major challenges that must be addressed: obesity and the associated economic costs, health care demands (and cost) associated with the aging American population, and a discussion of the pros and cons of a single payer, or universal health insurance system. The report concludes with a recommendation for an integrated National Health Strategy, analogous to the National Security Strategy, to focus governmental and private sector efforts, raise awareness, inform the public, and set the broad strategic direction necessary for radical change and improvement in the U.S. health care sector.

DEFINING THE HEALTH CARE INDUSTRY

The health care players are varied and are all considered an integral part of a larger system. This system has evolved into an Industry. This industry is not just limited to hospitals, doctors and patients. Although these are components of the industry, the system is far broader. It includes a wide variety of individuals, organizations, and institutions that may be public, private, for-profit and not-for-profit. Medical care professionals such as physicians, dentists, nurses, nurse practitioners, and physician assistants are at the center. Hospitals, primary care clinics, emergency medicine clinics, pharmacies, and group and individual clinician offices are the physical platforms upon which the medical operators execute their skills. Medical supply and pharmaceutical manufacturers and distributors provide the materials for these providers. Medical schools, universities and teaching hospitals provide manning requirements. Thus, the health care industry is in fact an extensive network of industries and regulatory bodies interacting domestically and internationally. This network includes, among others:

- Customers: Individual patients and the public at large.
- Producers: Medical schools, manufacturers and distributors of medical equipment and supplies, pharmaceutical industry, health food/vitamin industries, researchers.
- Regulators: International⁶, federal, state, and local government agencies, such as the World Health Organization, the Food and Drug Administration, Department of Health and Human Services, Congress, accreditation and licensing boards, and others, as well as public health professionals.⁷
- Providers: Doctors, nurses, technicians, pharmacists, assisted living and long-term care facilities, hospitals including mental hospitals, clinics, midwives, alternative medicine providers, and administrators.⁸

- Payers: Patients, employers, private insurance; federal, state, and local governments (Medicare, Medicaid, other); charities.⁹

This system of systems is perhaps best understood by viewing it as a supply chain or network. Manufacturers, such as drug companies and equipment suppliers, bring their products to market through distributors, who put their goods into the hands of health care providers, such as hospitals and physicians. These providers then sell their product and services, “health care,” to the end user, the patient or customer. All are subject to oversight by various regulators (see figure).

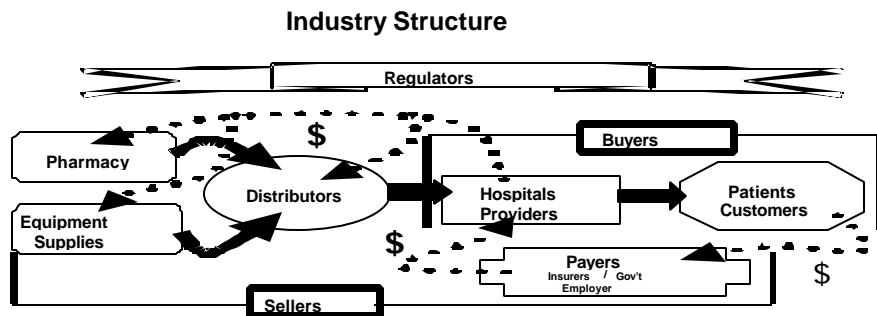


FIGURE 1

In this system, the patient only rarely negotiates price directly with the physician, although, ultimately, “the patient is indisputably the buyer and the physician the seller.”¹⁰ Multiple payers other than the patients choose health care services and prices; payers include insurers, employers, and state and federal governments, among others. These non-patient payers, however, do not provide an adequate market substitute for “buyers,” in the sense that not all non-patient purchase decisions are price or quality driven, as is the true consumer’s – that is, the patient’s.¹¹ As a result, “payment by insurance companies of most of patients’ health care expenses without regard for cost and appropriateness of care”¹² drives patients to demand all doctor recommended care without regard to price, and impels providers to supply more care than may actually be required. Thus, market failures prevent the health care industry from reaching its best potential efficiency in terms of resource allocation. This dichotomy clearly illustrates the disconnect between physicians and patients at a very fundamental level.

CURRENT CONDITIONS

RISING COSTS AND IMPLICATIONS FOR THE DOMESTIC ECONOMY

Current U.S. health care costs "are staggering."¹³ According to the 2004 edition of Plunkett's Health Care Industry Almanac, total U.S. health care expenditures in 2003 totaled 1.66 trillion dollars, with annual increases expected of about 6.8% per year through 2010. According to Plunkett, at the conclusion of 2004, the U.S. will experience its fifth successive year of "double digit gains in health care costs." The effect of rising health care costs on the U.S. economy threatens to generate the "Perfect Health Care Storm." An aging Baby Boomer population will demand their share of both lifestyle and life-extending prescription drugs over a longer life expectancy. Medicare and Medicaid entitlements are already contributing to deficit spending and the recently passed prescription drug benefit will further exacerbate the problem. Exuberance over expensive new medical technology and demand for greater plan flexibility in choosing doctors and specialists are further driving up costs. With the federal budget already in deficit, the country's health care and national security needs will soon be in direct fiscal competition.¹⁴

ADMINISTRATIVE COSTS

Of the \$1.66 trillion spent on healthcare in the United States, administrative expense accounts for about \$350 billion, which is associated with the multi-payer system described above. According to Senator Hillary Rodham Clinton, one in every four health care dollars goes to administration.¹⁵ Fourteen percent of private insurance companies' expenses are for administrative costs, while the Medicare system spends only two percent on administrative costs. Recently, President Bush presented an initiative for standardizing and digitizing medical records that would help to reduce the administrative costs, and the former Department of Health and Human Services Secretary, Tommy Thompson, has suggested that a national electronic medical records system could save the United States at least \$140 billion per year.¹⁶

EFFECT OF RISING COSTS ON FIRMS

In 2003, employers experienced a 16% increase in premiums paid to insurers, and in 2004, employers expect a 12% increase.¹⁷ The situation is acute for larger, more established firms that find themselves supporting huge retiree populations many times greater than their active work force. Lucent Technologies, for example, employs 22,000 workers who must carry the burden for 240,000 retirees and their spouses at a projected cost of \$1 billion annually. In

one survey, researchers Glass, Lewis and Company sampled 213 large employers and put their aggregate liability for retiree health costs at \$284 billion.¹⁸

Most worrisome is the impact of this liability on U.S. competitiveness in a global market, especially when measured against other developed countries with universal health care. For example, the situation is critical for the big three automakers. Health care costs add about \$1,300 to the cost of a U.S.-produced mid-sized car compared to the same car made in Canada, where the government covers health care costs.¹⁹ Compounding the problem for U.S. firms is the natural tendency to underestimate the rate of cost increases. In 1993 Ford Motor Company had predicted an annual health cost growth rate of 5.5%, but acknowledges now the rate was actually around 11%. If that rate holds steady through 2008, as many experts feel it will, Ford will be understating its obligation by \$20 billion.²⁰ Additionally, companies are having great difficulty banking the anticipated cost obligation. A recent study by Credit Suisse First Boston revealed that only 16% of the \$365 billion in post-retirement health costs owed by S&P 500 companies has been set aside.²¹ These rising insurance costs have induced employers to begin to pass health insurance costs on to their employees. In 2003, employees paid 50% more of their premium costs than they did in 2000. In addition, many employers are establishing ceilings on what they will pay for retirees.²²

MEDICAL MALPRACTICE

On January 15, 2003, in his State of the Union Address, President Bush called medical liability reform a national health care priority. Medical malpractice lawsuits and their high dollar jury verdicts were forcing health care providers and hospitals to practice defensive medicine, spiking malpractice insurance premiums, and even causing physicians to limit or leave the practice of medicine.²³ As a result, communities across the nation were losing access to medical care while the monetary costs of care to patients and taxpayers rose to unacceptable and unaffordable levels.²⁴ The crisis continues, and there is still no agreement on how best to address and resolve the medical malpractice crisis in America.²⁵ The estimated costs are staggering -- \$28 billion per year, or more, which taxpayers and the federal government absorb in the form of higher medical costs for treatment and care.²⁶

INFECTIOUS DISEASES

The United States and the world confront a major threat from new and re-emerging infectious diseases. Recent examples include the March 2003 spread of severe acute respiratory syndrome (SARS) from China to several other countries, including Canada and Singapore, and the spread of Bovine Spongiform Encephalopathy (BSE), commonly called

“Mad Cow disease” from a herd in Canada to the United States. The impact of this “small” outbreak of BSE may cost the U.S. beef industry over \$2 billion in 2004.²⁷ Throughout the developing world, but particularly in sub-Saharan Africa, Acquired Immunodeficiency Syndrome (AIDS) threatens stability and peace as it kills entire generations, orphans whole communities, and cripples nations. AIDS could kill as many as 68 million people in the next two decades, 55 million of them in Africa. Governments will falter, “with predictable effects on peace, justice, and public order.”²⁸

A January 2000, U.S. National Intelligence Council (NIC) report states “infectious disease-related death rates in the U.S. have nearly doubled to some 170,000 annually after reaching an historic low in 1980.”²⁹ The NIC goes on to report “new and reemerging infectious diseases will pose a rising global health threat and will complicate U.S. and global security over the next 20 years. These diseases will endanger U.S. citizens at home and abroad, threaten U.S. armed forces deployed overseas, and exacerbate social and political instability in key countries and regions in which the U.S. has significant interests.” The U.S. must develop and employ systems that prioritize education, research, reporting, and the allocation of limited health care resources to address these threats. The challenge requires sustained focus over time that will inevitably confront and conflict with sensitive political, social, and economic issues.³⁰

PUBLIC HEALTH AND INCIDENT MANAGEMENT

Three major issues continue to confront the public health system: adequate response capability in the hospitals and public health departments across the nation, sufficient funding for research in public health, and ensuring an adequate defense against possible bio-terrorism or other health-related attacks. Public health institutions have traditionally been inadequately interconnected. Data about individual patients or trends in diseases or symptoms have often been slow to reach the Centers for Disease Control and Prevention (CDC). Since the events of September 11, 2001, and international transmission of several highly infectious diseases, however, these trends have begun to change. The CDC and public health departments in several regions of the country have stepped up their use of Information Technology (IT) to collect reports and Internet web sites to disseminate information. Research has been directed towards proactive treatment and developing the ability to detect a bio-terrorism event early. Despite these advances, the public health system is not fully equipped to handle surges needed to respond to a terrorist attack on a long-term basis. This is in part because in the different scenarios, the first responders on the local level are the most accountable to their immediate community and the least funded. They will need access to information about infections or

illnesses rapidly. However, first responders are not part of the public health system since the federal response system distinguishes between them.

PHARMACEUTICALS

Although rising pharmaceutical costs contribute only about 10% to the overall rate of rising health care costs, drug costs are rising faster than any other single sector of the industry.³¹ Hospital costs constitute about 32% of total U.S. health care costs, physician visits about 22%, and drug costs roughly 10%.³² In contrast, however, although the overall rate of increase in health care spending in 2001 was about 9%, pharmaceutical costs rose at a rate of nearly 16%.³³ Analysts expect this trend to continue through 2004, because of high costs associated with drug development.³⁴ The average cost to develop a new drug, from concept through clinical trials, ranges from \$802 million to \$1.7 billion. Food and Drug Administration (FDA) regulatory requirements contribute to these costs, and require 10 years or more to complete.³⁵ Only 24 new drugs made it to market in 2001, compared to 48 in 1996.³⁶ Thus, although pharmaceutical manufacturing costs and therefore prices are on the rise, the increased spending is not producing commensurate results. These high prices give a greater impulse to the generic drug market. Beginning in 2003, the FDA began to permit producers of some generic drugs to accelerate the drug approval process, reducing by years the time required to bring a generic drug to market.³⁷

High domestic drug prices compared to lower prices outside the United States have produced a discussion over the merits of "drug re-importation." Drug re-importation means that drugs exported to foreign countries by U.S. manufacturers are then re-imported back into the U.S., and re-sold in the U.S. at a lower price than the same drug that had not been first exported. This anomalous phenomenon can occur because foreign countries such as Japan, Canada, Germany and France impose strict price controls on domestic drug sales. Drug companies agree to export and sell at those lower prices because the marginal cost of producing most pharmaceuticals is extremely low -- the big costs are in research and development. In order to recoup these costs, the companies simply charge full-market prices for the same drugs sold in the United States. From the drug makers' perspective, re-importation eats away at reasonable profits and is a disincentive to invest in costly new research. For the U.S. domestic buyer, however, it appears that "other countries reap the rewards of the millions spent on drug research and development in the U.S. without having to pay commensurate prices."³⁸

The recently enacted Medicare Prescription Drug Modernization and Improvement Act of 2003 would permit re-importation of prescription drugs from Canada if certified safe by the Secretary of the Department of Health and Human Service. To date, HHS has been unwilling to so certify, citing concerns over quality control of "counterfeit" drugs manufactured overseas.³⁹ With the enactment of the Medicare Prescription Drug Plan, the U.S. government will become the single largest purchaser of prescription drugs in America. Under the terms of the statute, however, the government is restricted from using its bulk buying power to purchase drugs at lower prices. Current estimates put the cost of the plan at \$530 billion dollars over the next 10 years.⁴⁰

MANAGED CARE

For the past two decades, managed care dominated the health insurance landscape. "Managed care" is a general term describing an organization comprised of groups of doctors, hospitals, and other providers to provide enhanced quality and cost-effective health care. Generally, this involves contracting with health care providers to deliver health care services on a capitated (per-member per-month) basis.⁴¹ Thus, managed care is a health delivery concept based on prepaid membership instead of straight compensation for service. Health Maintenance Organizations (HMOs) and other forms of managed care succeeded in containing costs in the 1990s by taking a tough negotiating stance with doctors and hospitals, forcing them to cut fees for surgeries, office visits, and other items. Plans had substantial power because they could deliver-or withhold-large numbers of patients from providers. Tight controls, however, eventually led to a consumer backlash. Since 2000, traditional HMOs have been on the decline, replaced by preferred provider organizations, which give patients greater flexibility over where they seek care and what kinds of treatment they receive. This flexibility comes at the cost of increasing insurance premiums.

HOSPITALS

The central provider in the U.S. health system, the hospital, is undergoing a difficult economic restructuring. At least one-third of U.S. hospitals are failing financially and another third are in precarious condition.⁴² Because of medical advances and costs containment measures, many procedures that once required hospitalization are now being performed on an outpatient basis. Fewer admissions and shortened stays have resulted in a significant reduction in the numbers of hospitals and hospital beds.⁴³

INFORMATION TECHNOLOGY

The incorporation of information management and technologies (IM/IT) into the health care industry continues at a slow, but steady pace. Starting at the periphery with electronic billing and working its way to the point of care, electronic storage and availability of patient medical information is improving unevenly, with larger organizations well ahead of the many smaller providers. While the management of laboratory and diagnostic studies is well digitized, the key to full exploitation of IM/IT potential in American health care is an electronic medical record, which would replace the institutional paper binder. Standardization of medical data would allow better provision of care through information availability as well as vastly improving public health and national security through medical surveillance of population disease outbreaks and trends. Lack of a national format and messaging standard, a myriad of incompatible local solutions, and strict patient information security to comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) set difficult but not insurmountable challenges to overcome.

Old ways of practice are slowly changing as the software and graphic user interfaces improve. Advantages of information access, improved documentation and processing are now becoming apparent to both the medical caregiver and administrator. As an example, the Veteran's Administration (VA) Hospital system was one of the first to deploy an enterprise-wide medical record with common elements allowing synergistic integrative use of all VA facilities.⁴⁴ This improved the standard of healthcare as well as administrative efficiencies. Civilian use of electronic medical records has been uneven; no industry-wide standards exist. Wide varieties of vendors offering different products with different foci complicate the choice. No single vendor has the complete solution, and enterprise selection must support business goals.

CHALLENGES:

Among the many security challenges facing this nation, there are serious national security challenges associated with the aging population, a growing obesity epidemic in the United States, and the pros and cons of a universal health insurance system for America.

THE AGING AMERICAN POPULATION AND ASSOCIATED DEMANDS

Declining fertility and longer lives have transformed the elderly from a relatively small to a significant component of the U.S. population. The number of Americans currently age 65 and over may double by 2040.⁴⁵ Health care costs for older adults will double as well. The growing number and proportion of older adults places increasing demands on medical and social services. In addition to direct medical and pension costs, this demographic shift will affect

general productivity and growth. While people are living longer, many practice unhealthy lifestyles, resulting in an increase in costly medical interventions. The dual increase in life expectancy and the incidence of chronic diseases will raise demand for health care professionals, technology and supplies, nursing, and long-term medical facilities, and will increase the associated costs to care for the ailing elderly. This becomes significant in health care systems that use the current work force to finance health care requirements for their retired population, as in the United States. While currently there are 5.4 working Americans for every retiree, by 2030 that ratio will have dropped to three to one. Together, Medicare and Medicaid paid \$470 billion of health care costs in 2001, amounting to one-third of the country's total health care bill.⁴⁶ Given the current entitlement structure and aging population, including the newly passed prescription drug bill, government health care spending may grow as much as 9% annually through 2014, potentially crowding out other discretionary budget spending priorities.⁴⁷ In one way or another, every social institution will have to accommodate the needs of our aging population.

Numerous observers have noted that the growth and change of America's older population ranks among the most important demographic development in the 21st century.⁴⁸ The aging of the population in the developed economies of the world is the result of two demographic phenomena. First, people today live longer than they did in the past, partly because fewer succumb to illnesses when they are young and partly because they live longer after reaching old age. Second, fertility rates are declining across most of the developed world and, to a lesser extent, the developing world.⁴⁹

The potential effect on the functional independence and quality of life and on the long-term care costs of a rapidly aging population is alarming. In the mid-1990s, the health care costs of chronic disease in older adults rose to \$470 billion and will double by 2040.⁵⁰ Senior citizens with no disabilities ran up an average of \$4,600 a year in health care costs, compared with \$8,500 a year for people with moderate disabilities, \$14,100 for those with more severe disabilities, and \$45,000 for nursing home patients.⁵¹ In the U.S. alone the deficit between political promises for the care of the aging and expected funding has been estimated at more than \$44 trillion.⁵² Over the last decade, states have increased their support for long-term care services in individuals' homes or in other community-based settings, such as adult day care, adult foster care homes, and assisted living facilities, as an alternative to care in nursing homes and other institutions.⁵³ However, with the coming retirement of 77 million baby boomers,⁵⁴ nursing homes will continue to have a solid place in society. Many baby boomers are likely to

be consumers of new technologies and products that will allow them to stay in their homes, or choose independence afforded by an assisted living facility.

When President Johnson signed the bill creating the "Older Americans Act" (OAA) on 14 July 1965 he said: "The OAA clearly affirms our nation's sense of responsibility toward the well-being of all of our older citizens." Created during a time of rising societal concerns for the poor and disadvantaged, the OAA set forth a broad set of objectives which are as relevant today as they were three decades ago.⁵⁵

The United Nations (UN) designated 1999 as the "Year of the Older Person," thereby recognizing and reaffirming what demographers and many others have known for decades: our global population is aging. At the dawn of the 21st century, population aging was poised to emerge as a preeminent worldwide phenomenon. European demographers have sounded warning bells for the last 30 years with regard to the possibility of declining population size in industrialized nations.⁵⁶ In the last 2 years, the visibility of a likely population decline has increased dramatically, in large part due to UN reports suggesting that populations in most of Europe and Japan will decrease in size over the next 50 years, and to actual declines in Spain, Italy, Russia, and other nations.⁵⁷

The U.S. is on the brink of a longevity revolution. The growing number and proportion of older adults places increasing demands on the public health system and on medical and social services. The health care cost per capita for persons 65 and older in the U.S. and other developed countries is three to five times greater than the cost for persons under 65 years, and the rapid growth in the number of older persons, coupled with continued advances in medical technology, is expected to create upward pressure on health and long-term-care spending.⁵⁸ In 1997, the U.S. had the highest health care spending per person aged 65 and older (\$12,100), but other developed countries also spent substantial amounts per person aged 65 and older, ranging from approximately \$3,600 in the UK to approximately \$6,800 in Canada.⁵⁹ The spending disparity is partly contributed to the cost of inpatient hospitalization and higher drug costs in America. The anticipated increase in the number of older persons will have dramatic consequences for public health, the health care financing and delivery systems, informal care giving, and pension systems.⁶⁰

The 1980s might be considered the decade of children, a time when employers established new policies for employees with young children. The boomers were having babies--a boomlet--and raising their families. Women joined the workforce in large numbers. Today, 86% of major employers offer some kind of childcare assistance.⁶¹ Now the boomers are facing a family challenge that they probably did not anticipate--the need to provide care for mom and

dad. According to a major study by the National Alliance for Caregiving, there are already 22.4 million U.S. households--nearly one in four--involved in family care giving to elderly relatives or friends.⁶² The profile of a typical caregiver is a 46-year-old woman who is employed and also spends around 18 hours per week caring for her mother who lives nearby.⁶³ A MetLife Study of Employer Costs for Working Caregivers found that the aggregate costs of care giving in lost productivity to U.S. business is \$11.4 billion per year. These figures are growing annually and now over 30% of employers offer eldercare programs.⁶⁴ Johns Hopkins University is an example of an employer that offers this type of assistance.

Long-term care options include nursing homes, home health care, and other assistance in one's home. In 1998, it was estimated that 5.8% of all persons aged 65 and over were living in nursing homes.⁶⁵ Nursing home admissions have recently declined as other forms of health care have increased. The average cost per day is \$75-\$235 in a nursing home as opposed to \$60-\$70 a day in an assisted-living facility.⁶⁶ Assisted-living facilities provide an alternative to nursing homes. According to recent studies, assisted-living facilities were operating nationwide, accommodating over 600,000 residents.⁶⁷ These facilities are the fastest growing housing options for older people. An example of a different type of assisted-living facility is the Armed Forces Retirement Home. This facility, located in northern DC, is a "one-stop" living opportunity from independent living through the step down process to complete care.

We are part of an increasingly interdependent and aging world. As the World War II baby-boom cohorts, common to many countries, begin to reach their elder years there will be a significant jump in their proportion of the world's population. The effects will be felt not just within the individual nations but also throughout the global economy. Although the average retirement age is 63, today more than 4.5 million Americans age 65 and over remain in the labor force.⁶⁸ Employers have realized the viability of this resource and they are trying to create flexible opportunities for employment. Older workers need more flexible work hours that create a positive impact on their lifestyle. The American Association of Retired People (AARP) has partnered with many organizations to hire older workers. Home Depot and Wal-Mart are two large organizations that hire many older workers. Hiring older worker allows these organizations to both, utilize these older workers as mentors and to retain and develop institutional memory and knowledge while at the same time, capitalizing on the experience these workers bring to their organizations.

To sustain this aging population several actions should be considered. First, America needs to support a change in the Medicare eligibility age from 65 to 67. It is my considered opinion that today's social security accounts and Medicare accounts are going broke due to the

increased pressures inflicted by the aging population. The longer the aging population works, and maintains a healthy lifestyle, the less time they will need to dip into the social security accounts; in fact, they will continue to pay into those accounts and hopefully remain a healthy, functioning member of the workforce. Secondly, more employers need to provide employment opportunities for the healthy, willing population that wants to continue to make positive contributions to society. Congress is on the right track by staying focused on this issue and following through with legislation to ease the pain of this growing phenomenon. Positive steps must be taken to avert a potential risk to national security. For example, within the next 3 years approximately 50% of all civil service workers will be retirement eligible.⁶⁹ The loss of this experience base could prove detrimental to locations such as the laboratories that are traditionally run by civil servants. This level of experience cannot be replaced overnight. Tailoring the departure of this workforce in a smooth fashion will help to ease the loss of experience at a level that's acceptable to everyone.

OBESITY IMPACT ON NATIONAL SECURITY

Although the aging population will place increasing demands on our medical and social services, obese Americans are presenting an equal challenge. In January 2003, the Surgeon General of the United States, Dr. Richard Carmona, declared the epidemic of obesity in the U.S. "severe enough to threaten national security."⁷⁰ The U.S. Centers for Disease Control and Prevention (CDC) subsequently predicted that obesity would overtake smoking as the leading cause of preventable death in the United States by 2005.⁷¹ The statistics supporting the government's statements are persuasive. Approximately two-thirds of U.S. adults are overweight,⁷² including those who are obese.⁷³ In the year 2000 at least 30 percent of children (ages 6-11) and adolescents (ages 12-19) were either overweight or "at risk" for overweight, falling in between the 85th and 95th percentiles.⁷⁴ The obesity epidemic, responsible for 400,000 deaths annually,⁷⁵ clearly affects the government's obligation to promote the general welfare, and, as the Surgeon General noted, it also has consequences for the national security of the United States. The consequences are examined in the context of the instruments of national power and require governmental action to address this national crisis.

Information: Obesity is an epidemic that has been in the making for decades.⁷⁶ Yet, a recent report from the CDC showing that poor diet and inactivity rival smoking as the leading "actual" cause of death in the U.S.⁷⁷ has drawn considerable attention from the government, the health insurance industry, and corporate America as it illustrates that obesity has a profound impact on personal health problems and associated rising health care costs.

Cardiovascular disease (CVD), which results in heart attacks, strokes, high blood pressure, angina, and other heart ailments, is American's number one killer of both men and women, accounting for approximately 40% of deaths in the US each year.⁷⁸ The other leading causes of death are cancer, stroke, chronic lower respiratory diseases, unintentional injuries, diabetes, pneumonia/influenza, Alzheimer's disease and kidney disease, but the CDC says the "actual" causes of death are lifestyle and behavior such as smoking, overeating and physical inactivity that contribute to the leading killers.⁷⁹

In response to the CDC report, the Department of Health and Human Services (DHHS) unveiled a national information campaign to educate all Americans about the causes, dangers and costs of obesity. Its strategy for fighting obesity is focused on a "Calories Count"⁸⁰ approach, promising an aggressive, science-based and consumer-friendly program. Major plan recommendations include revising the "Nutrition Facts" panel on food labels to highlight the critical role of calories and portion sizes; encouraging dietary guidance statements similar to the warnings that appear on cigarette packages; defining terms such as "low," "reduced," and "net" carbohydrates in light of increased popularity of "low carb" diets; encouraging the restaurant industry to launch a national, voluntary effort to include nutritional information for consumers at point of sale; and, revising FDA guidance for developing drugs to combat obesity.

Military: The military instrument of national power is the one most obviously affected by the obesity problem in the U.S. as it has a direct impact on readiness of the force. Weight and fitness standards date back to the Civil War, and in 2002 the Department of Defense (DoD) adopted Body Mass Index (BMI) as an additional measurement.⁸¹ With regular exercise programs in the military, and the fact that DoD's upper-limit BMI standard for overweight has been as high as "greater than 27.5" (two-and-a-half points higher than the federal standard), 1,400 service members were discharged for failure to meet the metric in 2002, joining more than 20,000 discharged between 1990 and 2002.⁸²

As of November 2003, 60% of the men and 40% of the women in the Army had a BMI at or above 25, classifying them "officially overweight."⁸³ The Navy fared even worse, with 69% of the men and 46% of the women earning that classification.⁸⁴ Service members who exceed the weight and/or fat standards often argue that they achieve excellent fitness-test performance. But unless and until the standards are changed, and it is unlikely that DoD would adopt standards significantly below those recently announced by DHHS, service members must meet the criteria, and there is concern on several fronts. First, studies indicate that some women and men in the military are resorting to unsafe practices such as fasting, using diet pills and/or laxatives, and vomiting to control weight.⁸⁵ Air Force personnel required to participate in a

weight management program, 65% of them male, reported that they vomited and used diuretics or saunas four times as often as a group of civilian dieters.⁸⁶ Another alarming report found that "close-to-overweight" Air Force smokers enrolled in a smoking cessation program were four times more likely to say they would take up smoking again to lose weight.⁸⁷ Obviously, these techniques are not conducive to the readiness of the force. As the Surgeon General stated when declaring obesity a threat to national security, "Our preparedness as a nation depends on our health."⁸⁸

Maintaining a pool of physically fit young adults to continue to fill the military ranks is also affected by obesity. A February 2003 study⁸⁹ found that a large percentage of the young adult population is over the military weight standards, particularly among minorities, who comprise a disproportionately large proportion of the military.⁹⁰ And, even if the services can recruit enough replacements, eight in 10 of all recruits who exceed the weight standards when they join end up leaving before finishing their first term, wasting recruitment and training costs.⁹¹ At least one reporter draws a connection between this outcome and the prevalence of fast-food restaurants on bases, reportedly a successful tool in a program to recruit young service members.⁹²

Economic: The National Institute of Health (NIH) recently estimated the annual medical spending due to overweight and obesity to be as much as \$92.6 billion in 2002 dollars (9.1% of U.S. health expenditures).⁹³ This is spending associated with weight-related disease including, primarily, diabetes, cardiovascular disease, gallbladder disease, and osteoarthritis. It is estimated that almost 80% of obese adults have one of these conditions, and that approximately 40% have two or more of them. All taxpayers are affected by increased Medicare and Medicaid costs, currently 21% of the federal budget, and indirectly bear the cost of \$3.9 billion in lost productivity costs related to obesity among Americans ages 17–64.⁹⁴

In addition to those numbers, and primarily because obesity is not recognized as a disease entitling it to traditional health care insurance coverage, Americans personally pay \$33 billion to the commercial diet industry.⁹⁵ Often these treatments, many unregulated and considered unethical, are without lasting effect.

Diplomatic: The U.S. does not stand alone in its fight against obesity. The number of overweight people worldwide had climbed to 1.1 billion by 2001, rivaling the number of undernourished and underweight.⁹⁶ In Europe alone, more than half of the adult population between 35 and 65 is overweight.⁹⁷ At the time of this writing, the U.S. was poised to sign the World Health Organization's blueprint for battling obesity.⁹⁸

Recommendations: The government has made an impressive beginning in turning the public's attention to the obesity epidemic, but it does not go far enough. A focused strategy of

prevention and treatment such as that once employed against infectious diseases could lead to the control of obesity. The U.S. could bring science and sanity to the chaos of weight loss by adopting the World Health Organization's view that obesity is not a failure of willpower but rather a condition controlled by a system of hormones, proteins, neurotransmitters and genes that regulate fat storage and body weight. Dr. Richard L. Atkinson, Jr., President of the American Obesity Association, stated, "It's time we recognize obesity as a chronic disease and dedicate federal resources into research and effective treatment programs."⁹⁹ In a report focused on the military, Dr. Atkinson recommended nutrition training for recruits and their families; improving fare in base dining facilities; increasing frequency of BMI assessments and establishing a military operational specialty (MOS) to train personnel responsible for implementation of weight management programs; and use of pharmacological treatment in accordance with MOS standards.¹⁰⁰

In terms of the general population, the U.S. must continue its information campaign focused on prevention through educational programs such as "Calories Count," and its "teen (ages 9-13)" campaign, which promotes physical fitness in that vulnerable group.¹⁰¹ Other recommended policies aimed at the youngest Americans include replacing junk food in schools with fresh fruits and vegetables; requiring, as opposed to recommending, that fast-food restaurant menus post calorie counts; funding hard-hitting education campaigns vice public service announcements; and a tax on soft drink cans as recommended by the Center for Science in the Public Interest (CSPI)¹⁰² to fund obesity programs. Incentivizing medical schools to teach a "clinical track" on obesity would also contribute to increased interest and understanding.

The bottom line is that the economic benefits of reduced obesity are compelling. The U.S. government spends more than 19% of its budget on health care, with much of those expenses related to poor nutrition and lack of physical activity.¹⁰³ With health care spending exceeding the budget for defense during the Global War On Terrorism, the U.S. must shift its focus to prevention and treatment of obesity rather than paying for the result. Failure to do so will result in increased costs as the baby boomers age, and, even worse, the first generation of American children who are not going to live as long as their parents.¹⁰⁴

UNIVERSAL HEALTH CARE: HOW DO WE PAY FOR IT?

The final significant challenge identified and discussed in this Strategy Research Project is the lack of health care coverage of an extremely large segment of the American work force. According to the Census Bureau, more than 43 million Americans had no health insurance in

2002 – an increase of over 2 million people from 2001 and the largest increase in more than a decade.¹⁰⁵ This amounts to a major health care crisis in our nation. Often, these are the unemployed or lower-income workers who earn too much to qualify for Medicaid and for the tax relief provision for the purchase of health insurance.¹⁰⁶ However, they earn too little to be able to afford monthly health care premiums for private insurance. Furthermore, they are more likely to work for a small business that does not provide health care benefits.¹⁰⁷

Recently, the fastest growing segment of the uninsured is comprised of middle-income to upper-middle-income families. The situation of the uninsured is rendered more acute by soaring health care costs. Senior citizens face an enormous affordability concern with prescription drugs and health care to the extent that some must make critical health decisions based on their ability to pay. This is not limited to the senior population, however; these issues of health care are devastating to individuals, children, families, and retirees. According to data from the Center for Medicare and Medicaid Services (CMMC), in the year 2000, Americans spent \$1.3 trillion on their health care needs.¹⁰⁸ The estimate for spending by 2010 is projected to increase to \$3.4 trillion. When compared to “socialized” health care systems, like those in Canada or Germany, Americans pay twice as much per-capita in medical costs - roughly \$4,000 per person.¹⁰⁹ Yet, average life expectancy for Americans is lower than for residents of Canada, Sweden, Japan, and Iceland. Possibly the hardest hit by the rising health care costs are states and small business owners followed closely by large businesses who saw their benefit costs increase to 16 percent in 2002.¹¹⁰

Universal health insurance coverage guaranteed by the federal government for those who cannot afford it is a political issue whose time has come.¹¹¹ The government passed the Medicare Prescription Drug Benefit to assist senior citizens to offset the high cost of prescription drugs. This is a major program that will benefit millions of senior citizens. However, millions more are still priced out of the health care market, suffering from preventable and curable conditions. In addition to causing them avoidable suffering, their poor health reduces their ability to work and pay taxes, sends them in emergencies to health care providers who receive no reimbursement, and acts as a general drag on the national economy. If they had health insurance, they could possibly avoid these problems.

Eventually the hard decision must be made. How does the government provide protection for the uninsured that cannot afford it for themselves? One possibility is health insurance backed in some manner by the government. In a 2003 Pew Research Center for the People & the Press survey, 67 percent of respondents said that they would be in favor of the U.S. government guaranteeing health insurance for all citizens, even if it means raising taxes.¹¹²

Major contributors to the staggering high cost of health care in the U.S. are as follows: private insurance companies' administrative costs, high premiums for catastrophic losses, inflated salaries of drug company CEOs, prescription drugs, medical innovation, and a growing acceptance of higher premium health plans that offer greater flexibility in choice or providers.¹¹³ The lack of preventive care is a major contributing factor as well.¹¹⁴

It is estimated that one quarter of the \$350 billion which the government spends on health care annually goes to administrative processes like paperwork and billing. Private U.S. insurance companies on average spend 14 percent in administrative costs while public healthcare systems like Medicare or the Canadian health systems spend only around 2 percent of their income in this manner.¹¹⁵ Another item driving up costs is paper-based record keeping. Replacing the current paper-based system with technology that includes electronic databases for billing and record-keeping would reduce costs, while lowering the rate of administrative and medical errors.¹¹⁶

One of the main reasons premiums rise for businesses is the cost associated with catastrophic losses. Until the nation finds a way to offset the risk of employers' high cost for catastrophic losses through tax incentives or some other means, it will continue to negatively impact employers. In comparison with Fortune 500 companies and other large corporations, pharmaceutical company CEO salaries are in line with compensation levels, as industry leaders. However, when you place CEO salaries in the context as they relate to the increasing costs associated with prescription drugs they seem outrageous.¹¹⁷ Pharmaceutical companies often cite the high cost invested in research and development of bringing new drugs to market as a substantial factor in the costs of prescription drugs. In America, much pharmaceutical and medical research is paid for with government money. During the 1990s, the federal government spent over \$10 billion annually on pharmaceutical Research & Development.¹¹⁸

How then should the government address the problem of the uninsured? There are several possible methods: 1) Rely on the economic growth of the nation to produce a strong economy that would offset the cost of the plan in the out years through well-planned tax policies. 2) Increase the payroll tax on individuals and put the proceeds into health savings accounts for both those taxed and the uninsured, sharing the burden among all citizens. 3) Assist individuals based on their ability to pay, establishing income level bands to determine need requirements.

The first method, relying on economic growth, left millions of Americans without coverage even during the boom years of the 1990's. Despite recent improvements, the nation's economy is unlikely to expand to that level of growth anytime soon.

The second method would establish medical savings accounts funded through payroll taxes. Currently there are three types of medical savings accounts offered by employers. They include medical savings accounts (MSAs), flexible spending accounts (FSAs) and health-reimbursement arrangements (HRAs).¹¹⁹ These share several features. First, all are by products of the federal law. They all marry health insurance plans with tax favored cash accounts that can be tapped to pay for medical expenses not covered by insurance. Finally, they can play an important role in a give-and-take strategy for health care inflation. They give consumers/patients more control over their own healthcare decisions.¹²⁰

How would such a plan be financed? One way would be to increase the payroll tax proportionally for all working individuals, directing those funds into a medical trust fund with matching contributions from the employer whose incentives are tax relief credits for participating in the program. The medical trust fund would continue to roll over from year to year leading to and through retirement. The federal government should impose an adverse health care tax that relates to the top contributors to major health care costs such as tobacco, alcohol and high fat foods that lead to obesity. The revenues acquired through this flat tax would go directly into a national health care trust fund that covers unemployed workers. With this plan, workers would not risk losing their coverage during periods of unemployment. The states would serve as a safety net for children not covered by the federal plan. The State Children's Health Insurance Program (SCHIP) should enroll every child into the program as they enter school. However, if they are covered by their parents' policy then by default the parents' policy becomes the primary coverage for the child.

The third method would establish income bands to identify the amount of assistance each worker needed to purchase health insurance. Employer contributions would be taken into account, and those with alternative insurance would be expected to treat the alternative as their primary insurer. There would be a means test excluding wealthy individuals who can purchase insurance without assistance. The poor, the working poor and seniors who lack health insurance or the ability to pay would receive total offset for medical cost.

The federal government should strive for an efficient health care system that encompasses quality, accessibility and affordability for all citizens and legal permanent residents. The focus of the plan should include initiatives stressing preventive care and wellness education from an early age. A campaign of public awareness targeting causes that lead to major serious illnesses such as coronary heart disease, lung cancer and obesity will help reduce high risk associated with those illnesses. In the future this will significantly affect the overall cost of health insurance. Health care in this country cannot take the same avenue as

social security. The requirement to pay payroll taxes or to increase the amount we pay to support health care should by law be set aside in a health care trust fund for use to pay for or offset the cost of medical coverage for all Americans.

OUTLOOK

ABILITY TO SUPPORT NATIONAL SECURITY RESOURCING REQUIREMENTS

The health care industry can support national security requirements, including defense-related health care and surge capacity, over the next decade or more. However, the stresses caused by the aging population and the rising cost of health care make the outlook for the nation's health, and therefore the nation's security, more tenuous. Over the next 10 to 20 years, age-related illnesses and disabilities may result in higher per-person demands on healthcare. As we prosecute the Global War On Terrorism, current and future defense spending rates will challenge the nation to find adequate resources to fund both national security and quality health care. Competing civilian sector requirements will also make it increasingly difficult for the military and public health sectors to recruit and retain a qualified workforce.

SHORT TERM TRENDS (1-5 YEARS)

Pharmaceutical costs are likely to continue to rise rapidly. Buyers will increasingly turn to generic drugs as insurers begin to pass costs on directly to patients. The Medicare prescription drug program will probably slow this change until the program adjusts to pass consequences of drug selection directly to the patient. The number of uninsured Americans will probably continue to increase. Employers, struggling with health insurance costs, will either discontinue coverage, or pass costs to employees. Innovative insurers will tie premiums to preventive health practices, for example, by discounting insurance costs for clients with healthy blood pressure, low cholesterol numbers, and healthy body fat levels. Rapid innovations in biotechnology will produce efficiencies in health care, and new treatments. The U.S. lead in this area, however, this lead may shrink due to restrictive security policies slowing immigration, poor domestic science and math curricula, and declines in funding for controversial areas of research.¹²¹ Many patients seeking cost savings and more holistic care will turn to alternative treatments, such as Chinese medicine, or fee for service care from physicians who secede from managed care and insurance-paid systems.¹²² To contain costs, providers will slowly begin to change their care paradigm toward preventative care. Insurance and Medicare coverage, which focus on treatment, will retard this process until payment for preventive care begins to be permitted.

LONG TERM OUTLOOK (2010-2020)

A new health care paradigm may emerge which focuses on holistic and preventative care strategies, potentially integrating alternative and non-traditional forms of medicine, to reduce costs by focusing on disease prevention rather than cure and repair. There will be a continuing risk that emerging, re-emerging, antibiotic-resistant, and microbial mutations of infectious diseases will spread rapidly and overwhelm health care delivery systems worldwide.¹²³ Fighting these diseases will require more international cooperation, bilaterally and through the World Health Organization, to develop preventative public health response strategies.

POLITICAL AND SOCIAL FACTORS

American individualism and access to enormous amounts of information via the Internet will produce increased patient participation in individual health care decisions. Risky behaviors (smoking, overeating, lack of exercise, use of drugs) will decline only slowly. Access to, and quality and cost of, health care will persist as hot political issues. Politicians, however, will continue to be reluctant to seek comprehensive solutions to health care problems, fearing that such solutions will be unpopular. Lobbyists for industry and provider groups will continue to invest heavily in the political campaigns of those who support their positions. Ideology drives some politicians (and voters) to stress individual choice and the private sector's role in health care, and others to seek a broader government role. These ideological differences will continue to pose impediments to legislative resolution of health care industry problems.

GOVERNMENT ROLES AND GOALS

ROLES

Health care in the U.S. is an industry driven more by the capitalist free market economy than by government intervention. The government, however, does serve multiple roles, including consumer of health care services (e.g., medical care for the military), provider (veterans' health care), payer (Medicare and Medicaid), and regulator (e.g., the Food and Drug Administration). Government roles include funding basic research, conducting of health surveillance and data collection and analysis, detecting outbreaks of disease and organizing response, and, following the terrorist attacks of September 11, 2001, defending against bio-terrorism and preparing for mass casualty events.¹²⁴

Congress has enacted six primary statutes that have significant impact on U.S. health care: the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Public Health Service Act, the Social Security Act which governs Medicare and Medicaid, the Food, Drug and

Cosmetic Act, the Head Start Act, and the Older Americans Act.¹²⁵ The Department of Health and Human Services (DHHS) serves as the Executive branch agent with the mission “to enhance the health and well being of Americans by providing for effective health and human services and by fostering strong, sustained advances in the sciences underlying medicine, public health, and social services.”¹²⁶ The U.S. Food and Drug Administration (FDA), a component of DHHS, regulates the pharmaceutical industry to ensure new drugs are properly developed and tested before permitting sales.¹²⁷

GOALS

In spite of its unique position, and notwithstanding the above, the government has no comprehensive national health care strategy. Without conceptual unity among Americans regarding fundamental health care values and objectives, health care costs will likely continue to grow out of proportion to the quality of and access to care provided to the population as a whole. Thus, the most important role for the federal government must be to foster a national discussion and debate to reach a broad consensus on three fundamental and related questions: First, what are America’s health care values? Second, and implicit in the first question, is health care a fundamental right? Third, to just how much health care are Americans entitled? As part of the 2004 presidential election campaign, each candidate outlined their particular plan, but neither focused on the basic strategic issues just mentioned.¹²⁸ The National Business Group on Health has concluded that neither plan emphasized policy options that will hold down costs, either for employers or for taxpayers as a whole.¹²⁹

To produce the needed strategic debate, I am recommending the adoption of a requirement for a National Health Strategy, analogous to the National Security Strategy, to focus governmental and private sector efforts and begin to establish unity of effort in U.S. health care strategy. To induce sufficient rigor in the system, Congress should pass, and the President approve, legislation requiring the President to submit to Congress on a biennial basis a written report that specifies the purpose, goals, objectives, and requirements of the U.S. health sector. Much as the National Security Strategy focuses debate and discussion about broad policy issues necessary for the security of the nation, a National Health Strategy would raise awareness, inform the public, and set a broad strategic course necessary for radical change in the U.S. health care sector. To balance quality care with broad access and cost control, the following goals should be included in any set of national health care strategic objectives:

- Comprehensive coverage for all Americans, most likely involving mandatory employer health insurance at some minimum level, with the government as a health insurer of last resort. Individuals should be encouraged through vehicles such as Health Savings Accounts to augment their basic coverage for medical care, much like the IRA works for pensions. These concepts were expanded upon earlier under the Universal Health Care subparagraphs.
- Reorient the focus of public health from intervention to prevention. This includes systematic Health Education and Awareness Programs and incentive and accountability policies for healthy lifestyles. This concept was also expanded upon earlier under the Obesity Impact on National Security subparagraphs.
- A more robust National Strategic Stockpile of pharmaceuticals and vaccines for key infectious disease threats, with liability indemnification for suppliers of the stockpile. At the international level, the U.S. should continue to participate in cooperative international strategies to control the spread of diseases at the source.
- As proposed by President Bush, and endorsed, at least in principle, by Senator Hillary Rodham Clinton, the establishment of an information technology and information management process to streamline medical records and reduce administrative costs. Electronic medical records would make a good first incremental goal.

CONCLUSIONS

As stated in the opening thesis statement of this study, the quality of health care in terms of treatment, system responsiveness, and health inequalities among the population in the United States is not commensurate with its cost. As has been discussed, U.S. health care costs are too high for the quality of health care provided. Moreover, government and private industry spending on health care threatens an impending national fiscal crisis as Americans age, but live longer with chronic diseases, and engage in unhealthy lifestyles producing problems such as obesity. The U.S. must control costs while ensuring broad access to high quality care. Current health care approaches tend to treat cases rather than patients. Doctor – Patient primacy has been lost and must be reestablished. Non-patient payers such as insurers and Medicare pay for care based upon treatment of diseases or injury rather than on a more holistic view of a patient's well being as a whole. Thus, the system permits payment for the treatment of distinct diseases and injuries rather than for keeping the patient healthy, which would reduce costs by preventing disease. Consequently, the current construct rewards providers for providing more

care and services, but not necessarily for keeping people healthier.¹³⁰ A change in this approach is essential to containing costs while ensuring overall population health.

The U.S. needs new strategies focusing on leveraging information technology and on more holistic and preventative care approaches. The structure of the overall system must change to reward health care providers and payment plans that treat patients in a preventative manner with long term health as the primary objective, and to reward patients – that is, buyers -- who make good behavioral and life style decisions that reduce the frequency of expensive medical interventions. The current system is paralyzed by factors that strongly inhibit change, such as firms with successful business models unwilling to risk financial stability, a system of policy making and financing controlled by federal law and administrative agencies, institutions that lobby fiercely against change, and a public that lacks the language or framework for conceiving alternatives.¹³¹ There are no easy solutions to the complex problems of health care, and there will be intense political resistance to change from the major stakeholders. Yet, change we must, and the public must demand it. Our National leadership must promote that demand. The decisive issue is whether change will be fundamental and timely, or incremental and too late. Development now of a National Health Strategy provides the best chance to produce the needed fundamental change in time to avert fiscal disaster.

WORD COUNT=9,878

ENDNOTES

¹ Hillary Rodham Clinton, U.S. Senator, "Now Can We Talk About Health Care," *New York Times*, 18 April 2004, sec 1A, p. 6.

² World Health Organization Press Release 2000. "The World Health Report 2000 – Health Systems: Improving performance." 21 June 2000. Available from <http://www.who.int/inf-pr-2000/en/pr2000-44.html>; Internet; accessed 10 October 2004. "The U. S. health system spends a higher portion of its gross domestic product than any other country but ranks 37 out of 191 countries according to its performance, the report finds. The United Kingdom, which spends just six percent of gross domestic product (GDP) on health services, ranks 18th. Several small countries – San Marino, Andorra, Malta and Singapore are rated close behind second- placed Italy." "Who's assessment system was based on five indicators: overall level of population health; health inequalities (or disparities) within the population; overall level of health system responsiveness (a combination of patient satisfaction and how well the system acts); distribution of responsiveness within the population (how well people of varying economic status find that they are served by the health system); and the distribution of the health system's financial burden within the population (who pays the costs)."

³ Plunkett Research, Ltd. "Plunkett's Health Care Industry Almanac, 2004" (1 January 2004). 9. (hereafter cited as Plunkett).

⁴ *Ibid.*, 8.

⁵ Julie E. Matthews, "The Physician Self-Referral Dilemma: Enforcing Antitrust Law as a Solution," *American Journal of Medicine*. (1993): 523.

⁶ International actors in this industry include overseas providers and customers, international organizations such as the World Health Organization (WHO) and non-governmental organizations engaged in health-related activities, and international agreements intended to hamper the spread of diseases.

⁷ Public health programs range from routine vaccinations to health statistics, laboratory analyses, and tracking and reporting of disease outbreaks. They involve health care providers, hospitals, and government entities from local public health departments to the Centers for Disease Control (CDC) and the Department of Health and Human Services (DHHS).

⁸ Herbology, acupuncture, and other branches of alternative medicine continue to have a devout, but small, following in the U.S. Some of them advocate alternative medicine as a complement to Western medicine and not necessarily as an alternative to it. Although the underlying science is not yet well understood, there is evidence that there are benefits for treating diseases and chronic conditions and it should not be dismissed.

⁹ Medicare/Medicaid: Medicare provides coverage to approximately 40 million Americans. Medicare is the national health insurance program for people age 65 or older, some individuals under age 65 with disabilities, and people with End-Stage Renal Disease. The federal government administers Medicare and Medicaid services under the DHHS' Centers for Medicare & Medicaid Services. Medicaid is a state-run federally subsidized program offering health care to America's poorest and is covered by Title XIX of the Social Security Act. The federal statute identifies over 25 different eligibility categories for which federal funds are available.

¹⁰ William M. Sage and Peter J. Hammer, "A Copernican View of Health Care Anti-trust," *Law & Contemporary Problems* (Fall 2002): 241-242.

¹¹ Linda Greenhouse, "Justices Hear Arguments About Health Maintenance Organizations (H.M.O.) Malpractice Lawsuits," *New York Times*, 24 March 2004, sec 1A, p. 5. Two cases argued last spring before the Supreme Court of the United States well illustrate this dilemma. Patients sued insurance companies for making treatment decisions that provided less expensive care by Health Maintenance Organizations than that recommended by physicians. "The ability of patients to sue health maintenance organizations for damages for the denial of needed care is one of the most contentious issues in the health care debate, and this case has drawn intense interest from the industry and consumers alike. . . Juan Davila, one of the two patients whose suits led to the Supreme Court case, was prescribed Vioxx by his doctor for arthritis but was required under his Aetna health plan to try two less expensive medications first. One of those drugs caused severe gastrointestinal bleeding that sent him to the emergency room. The other patient, Ruby Calad, was hospitalized for a hysterectomy and other abdominal surgery under a Cigna HealthCare plan that authorized a one-day stay for those procedures. Though her surgeon recommended a longer stay, Cigna's hospital-discharge nurse refused to authorize it. Ms. Calad suffered complications at home and had to make an emergency return to the hospital several days later. The two cases, consolidated for the argument, are Aetna Health Inc. v. Davila, No. 02-1845, and Cigna HealthCare of Texas v. Calad, No. 03-83."

¹² Julie E. Matthews, 529.

¹³ Plunkett, 8.

¹⁴ Ibid.

¹⁵ Hillary Rodham Clinton.

¹⁶ "Congress Daily," *National Journal Magazine Online* 7 May 2004 [journal on-line]; available from <<http://nationaljournal.com/cgi-bin/ifetch>>; Internet; accessed 10 October 2004.

¹⁷ Plunkett, 9.

¹⁸ Gretchen Morgenson, "And You Thought Pension Funds Were Scary," *New York Times*, 14 December 2004, sec 1A, p. 3.

¹⁹ Downey Kirstin, "A Heftier Dose to Swallow; Rising Cost of Health Care in the U.S. Gives Other Developed Countries an Edge in Keeping Jobs," *The Washington Post*, 6 September 2004, sec E, p. 1.

²⁰ Rachel Beck, "Retiree Benefit Plans Underestimated," *Associated Press Online*, 16 January 2004; available from <http://www.ap.org/>; Internet; accessed 10 October 2004.

²¹ Ibid.

²² Plunkett, 10.

²³ David Dial et al., *Tort Excess: The Necessity for Reform From a Policy, Legal, and Risk Management Perspective*, (Insurance Information Institute, 2004); available from

<<http://www.iii.org/media/hottopics/insurance/liability/tort/>>; Internet; accessed 24 October 2004. In 2002, medical malpractice jury verdicts held 3 of the top 10 highest monetary awards: a \$95.2 million birth injury malpractice case; a \$91 million malpractice verdict; and a \$80 million birth injury malpractice case. Recoverable damages in a medical malpractice lawsuit focus on economic and non-economic compensation. Economic damages include loss of income and income-earning potential, and present and future medical expenses. Non-economic expenses focus on the pain and suffering brought about as a result of the malpractice incident and its consequences. Punitive damages are another form of compensable damages used specifically to punish, penalize, and deter the negligent conduct.

²⁴ "President Calls for Medical Liability Reform," 16 January 2003; available from <<http://www.whitehouse.gov/news/releases/2003/01>>; Internet; accessed 24 October 2004. See also, Geri Aston, "Bush Urges Tort Reform, Drug Benefit," 10 February 2003; available from <http://www.ama-assn.org/amednews/2003/02/10/gvzb0210.htm>; Internet; accessed 24 October 2004.

²⁵ "Medical Malpractice - Hot Topics and Insurance Issues," *Insurance Information Institute*, 10 February 2004; available from <http://www.iii.org/media/hottopics/insurance/medicalmal>; and "President Bush Disappointed in Senate Decision," *American Medical Association*, 10 July 2003; available from <<http://www.ama-assn.org/ama/pub/article/9255-7878.html>>; Internet; accessed 24 October 2004. On July 9, 2003, the Senate failed to take action on the Patients First Act of 2003 (Senate Bill 11). Unable to overcome a Senate filibuster led by partisan politicians, the legislation never proceeded to vote (46 Democrat Senators and 2 Republican Senators voted to continue the filibuster . . . while 49 Senators voted to proceed to a vote. Terminating a filibuster requires a total of at least 60 votes). Senate Bill 11 proposed a \$250,000 cap on non-economic damages, a sliding scale on attorneys' fees, a time limitation on filing a malpractice claim, and proportional liability assessment based on responsibility. Renewed legislative efforts in 2004 met a similar filibuster fate. "Senate Rolls on Medical Malpractice," *The Mercury News*, 25 February 2004; available from <http://www.mercurynews.com/mld/mercurynews/news/world/8035155>; Internet; accessed 24 October 2004. Recognizing the difficulty of passing an all-inclusive bill for tort reform, The Healthy Mothers and Healthy Babies Access to Care Act (Senate Bill 2061, submitted for Senate approval on February 24, 2004), was an attempt to address the malpractice crisis as it pertained only to obstetrical or gynecological services. The Senate vote again fell largely along partisan lines (41 Democrats and 3 Republicans voted to continue the filibuster . . . and 48 Republicans and 1 Democrat voted to proceed, falling short of the necessary 60 votes to break the filibuster). Jesse L. Holland, *Republicans Push Medical Malpractice Bill*, 23 February 2004, available from <http://www.wtopnews.com/index.php?nid>>; Internet; accessed 24 October 2004. Despite successive defeats, Republicans within the Senate maintained that they would submit similar legislation on behalf of emergency room physicians and for physicians practicing in areas with few other providers

²⁶ Joseph Curl, *Bush Seeks to Contain Junk Medical Lawsuits*, The Washington Times Online, 27 January 2004, available from <<http://washingtontimes.com/national/20040126-105846-6092R.htm>>; Internet; accessed 24 October 2004. Speaking to doctors and staff at the Little Rock Baptist Health Medical Center, in Little Rock, Arkansas, President Bush maintained that "Lawsuits not only drive up premiums, which drive up the cost to the patient or the employer of the patient, but lawsuits cause docs to practice medicine in an expensive way in order to protect themselves in the courthouse . . . and such defensive medicine drives up the government's health care costs by \$28 billion a year." These higher costs result in higher health

care insurance premiums for individuals, employers, and the federal government (higher costs for Medicare and Medicaid programs, federal subsidies for health care, etc.). See also, "Medical Malpractice, National Conference of State Legislatures," *State Health Lawmakers' Digest*, III, no. 4 (Summer 2003): 7. In 1998, GAO estimated the annual cost of defensive medicine at \$10 billion.

²⁷ "A Bum Steer on Mad Cow Disease," *Business Week Online* 12 January 2004 [journal on-line]; available from <<http://www.business.com/magazine/content/0402/b3865034.htm>>; Internet; accessed 10 November 2004.

²⁸ Tommy G. Thompson, "One Effort, One Goal: The Global Fund to Fight AIDS, Tuberculosis, and Malaria and The President's Emergency Plan for AIDS Relief," *Seton Hall Journal of Diplomacy and International Relations* 4 (Summer/Fall 2003): 13.

²⁹ "The Global Infectious Threat and Its Implications for the U.S.," *National Intelligence Council*, (January 2000): 2-3.

³⁰ Paul Davis, "Overcome Financial Challenges, Make Global Treatment and Prescription the Rule," 27 November 2002; available from <<http://lists.essential.org/pipermail/ip-health/2002-November/003780.html>>; Internet; accessed 10 November 2004. As reported by Dr. Anthony Fauci, Director, National Institute of Allergy and Infectious Diseases, we are at a pivotal point in our fight against the HIV/AIDS virus. Despite significant advances in HIV treatment and prevention, the worst of the pandemic may lie ahead unless the global community overcomes the challenges of limited financial resources and logistical distribution of supplies and medicines. The stigma, prejudice, and discrimination associated with HIV/AIDS continue to challenge our progress.

³¹ Statistics by Dr. Stephen J. Bocuzzi, *citing Centers for Medicare and Medicaid Services*, January 2003.

³² Ibid.

³³ Ibid.

³⁴ Plunkett, 11.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid., 11. "In late 2003, the Food and Drug Administration announced that it would allow makers of some generic drugs to take shortcuts in the approval process . . . a drug taking the short route would not have to be an exact copy of the branded original, and it would not be required to prove its safety and effectiveness since this proof was documented for the original. This short route is an option for the makers of different dosage forms, such as patches and over-the-counter substitutions of already approved drugs."

³⁸ Ibid., 12.

³⁹ U.S. Department of Health and Human Services, National Institutes of Health, (NIH Pub. No. 03-4158).

⁴⁰ Amy Goldstein and Jukiet Eilperin, "Medicare Drug Cost Estimate Increases," *Washington Post*, 30 September 2004, sec E, p. 2.

⁴¹ "The Evolution of Managed Health Care," *Integrated Health Care Association*; available from <<http://www.aha.org/gloss.htm>>; Internet; accessed 10 November 2004. "Under capitation, providers -- hospitals and/or physicians -- agree to accept a set advance payment in exchange for providing health care services for a group of people, usually for a year. Hospitals and/or physicians receive payments per member per month for a comprehensive set of services, or for a more specialized service, such as cardiac care. Whether a member uses the health service once or a dozen times, a provider who is capitated receives the same payment."

⁴² Harry A. Sultz and Kristina M. Young, *Health Care USA, Understanding its Organization and Delivery*, 3rd ed. (Aspen Publishers, 2001), 67. See also Plunkett, 17. ("In recent years, hospital occupancy has plummeted.").

⁴³ Ibid.

⁴⁴ VA Resource Information Center, *Veterans Health Information System and Technology Architecture (VISTA)*, available from <<http://www.virec.research.med.va.gov/DataSourcesName/VISTA/VISTA.htm>>; Internet; accessed 11 November 2004.

⁴⁵ US Census Bureau, *Decennial Census Data, Population Projections*, (United States Census 2000, 1 April 2000), available from <<http://www.census.gov/main/www/cen2000.html>>; Internet; accessed 11 November 2004.

⁴⁶ Katharine Levit, "Trends in U.S. Health Care Spending 2001," *Health Affairs* 22 (January/February 2003): 154-164.

⁴⁷ Joseph R. Antos, "Fixing the New Medicare Law #2: How to Promote Real Medicare Cost Containment," *The Heritage Foundation Policy, Research and Analysis Backgrounder #1751*, 26 April 2004; available from <<http://www.heritage.org/about/searchresults.cfm>>; Internet; accessed 11 November 2004.

⁴⁸ Watson Waytt Worldwide, "Living Happily Ever After: The Economic Implications of Aging Societies," *World Economic Forum Research Report*, 2004; available from <<http://www.watsonwyatt.com/research/resrender.asp?id=ONL009&page=1>>; Internet; accessed 11 November 2004.

⁴⁹ Ibid.

⁵⁰ "Global Report on Aging" *American Journal of Health Promotion*, 18 (November/December 2003): 6-7.

⁵¹ Ibid.

⁵² "The Coming Battle of the Ages," *Washington Post Online*, 1 Feb 04; available from <www.washingtonpost.com>; Internet; accessed 20 November 2004.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Department of Health and Human Services, Administration on Aging. "Older Americans Act," available from <http://www.aoa.gov/about/legbuds/aoa/legbuds_oaa.asp>; Internet; accessed 20 November 2004.

⁵⁶ Department of Health and Human Services, Administration on Aging. "An Aging World 2001," available from <<http://www.aoa.gov/prof/Statistics/profile/2003/3asp>>; Internet; accessed 20 November 2004

⁵⁷ Ibid.

⁵⁸ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report*, 52 (14 February 2003), available from <<http://www.cdc.gov/mmwr/>>; Internet; accessed 28 November 2004.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ "From Childcare to Eldercare: Our Turn to Care for Mom and Dad," *Journal of Financial Service Professionals*, (28 September 1999): 2.

⁶² Ibid.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ U.S. Department of Health and Human Services, Administration on Aging. "An Aging World 2001.", 16.

⁶⁶ Ibid.

⁶⁷ Ibid., 18.

⁶⁸ Ibid., 19.

⁶⁹ US Census Bureau, *Decennial Census Data, Population Projections*, (United States Census 2000, 1 April 2000).

⁷⁰ Kim Severson, "Obesity - A Threat to U.S. Security" (Surgeon General Urges Cultural Shift), *San Francisco Chronicle*, 7 January 2003; available from <<http://www.safegate.com/chronicle/>>; Internet; accessed 29 November 2004.

⁷¹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Fact Sheet: "Actual Causes of Death in the United States, 2000."* (Hereafter cited as USDHHS Fact Sheet).

⁷² The National Institute of Health's (NIH) chart and calculator, "Having a Body Mass Index (BMI) Greater Than 25," *National Institutes of Health*; available from <<http://www.nhlbisupport.com/bmi/>>; Internet; accessed 29 November 2004.; a BMI greater than 30 defines "obese." BMI is a calculation based on weight and height, and is not gender specific. NIH calculates BMI using the formula weight (kg)/height squared (m²).

⁷³ U.S. Department of Health and Human Services, National Institutes of Health, "Statistics Related to Overweight and Obesity," *NIH Pub. No. 03-4158*, July 2003; NIH provides the following statistics by age and gender:

Overweight: All adults (20+ years old): 129.6 million (64.5)

Women (20+ years old): 64.5 million (61.9%)
Men (20+ years old): 65.1 million (67.2%)

Obese: All adults (20+ years old): 61.3 million (30.5%)
Women (20+ years old): 34.7 million (33.4%)
Men (20+ years old): 26.6 million (27.5%).

⁷⁴ U.S. Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition. "Calories Count: Report of the Working Group on Obesity," (12 March 2004); Internet; accessed 29 November 2004.

⁷⁵ Ali H. Mokdad, "Actual Causes of Death in the United States, 2000," *Journal of the American Medical Association* 291 (10 Mar 2004): 1238

⁷⁶ Ilene V. Smith, "Combating Obesity," *Special Supplement of Newsweek*, 22 March 2004, 15.

⁷⁷ USDHHS Fact Sheet.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ U.S. Department of Health and Human Services, Food and Drug Administration.

⁸¹ Amanda Spake, "Fat, But Soldiering On," *U.S. News and World Report* 135 (27 March 2003): 70. [database on-line]; available from ProQuest; accessed 29 November 2004. Title 10 U.S. Code 1169 gives each service the authority to set its own fitness criteria within maximum DoD guidelines.

⁸² Ibid.

⁸³ Ibid., 71.

⁸⁴ Ibid.

⁸⁵ Ibid. A 2001 survey of more than 1,200 women from all branches of the service found that nearly 19% of those in the Army and 38% of female marines said they fasted to control

weight. More than 13% of Air Force women and 28.6% of female marines took diet pills, 12% used laxatives, and 2% to 3% vomited.

⁸⁶ Ibid.

⁸⁷ Reuters. "Obesity Is Increasing in the Military," *Los Angeles Times Online* (11 November 2001); [database on-line]; available from ProQuest; accessed 29 November 2004.

⁸⁸ Severson.

⁸⁹ Obesity Epidemiology Study conducted jointly by Johns Hopkins University and the University of Buffalo. "Many Young American Adults Exceed Current U.S. Military Weight Standards," *Obesity Fitness and Wellness Week* (01 Feb 2003).

⁹⁰ Ibid. Specifically, the study found "that the percentage of young adults whose weight exceeded the military weight standard ranged from 13-18% for men and 17-43% for women. When stratified by race, 15-20% of non-Hispanic white men and 12-36% of non-Hispanic white women were over the weight standards, 11% to 19% of non-Hispanic black men and 35-56% of non-Hispanic black women were over the standards, and 13-24% of Mexican American men and 26-55% of Mexican American women exceeded the military weight standards."

⁹¹ Spake, 70.

⁹² Chris Ayers, "U.S. Troops are Losing Battle of the Bulge," *London Times Online*, (18 November 2002); available from <<http://www.ihpra.org/ustroops.htm>>; Internet, accessed 29 November 2004.

⁹³ U.S. Department of Health and Human Services, National Institutes of Health, (NIH Pub. No. 03-4158).

⁹⁴ Ibid. This value considers the following annual numbers (for 1994):

- Workdays lost related to obesity: 39.3 million
- Physician office visits related to obesity: 62.7 million
- Restricted activity days related to obesity: 239.0 million
- Bed-days related to obesity: 89.5 million.

⁹⁵ Amanda Spake, "Rethinking Weight: Hey, Maybe It's Not a Weakness. Just Maybe it's a Disease," *U.S. News and World Report* 136 (09 February 2004); 50-56. [database on-line]; available from ProQuest; accessed 29 November 2004.

⁹⁶ Lester Brown, "Obesity is a Threat to World Health," *American Fitness Journal* (May 2001) 23-25.

⁹⁷ Ibid.

⁹⁸ "Global Diet Strategy Adopted - World Health Organization (WHO) Approves Blueprint for Battling Obesity," 24 May 2004; available from <<http://www.cnn/2004/health/diet.fitness/05/25/>>

un.diet.strategy.ap/index.html>; Internet; accessed 29 November 2004. The voluntary plan sets forth recommendations on reducing sugar, fat and salt in processed food; controlling food marketing to children and health claims on packaging; and more nutrition labeling and health education.

⁹⁹ Reuters.

¹⁰⁰ Dr. Richard L. Atkinson, Jr., "Weight Management: State of the Science and Opportunities for Military Programs," *The National Academy Press*, August 2003; available from <<http://books.nap.edu/catalog/10783.html>>; Internet; accessed 2 December 2004.

¹⁰¹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "National Campaign to Get Kids Physically Active is Working," *Press Release*, (17 Feb 2004); available from <<http://www.cdc.gov/oc/media/pressrel/r040217.htm>>; Internet; accessed 2 December 2004.

¹⁰² Michael F. Jacobson, Executive Director, Center for Science in the Public Interest (CSPI), "Responds to Food and Drug Administration Obesity Report," 12 March 2004; available from <<http://www.cspinet.org/new/200403121.html>>; Internet, accessed 8 December 2004.

¹⁰³ Dr. George Blackburn, Associate Director, Division of Nutrition, Harvard Medical School, "Obesity and Other Diet-and Inactivity-Related Diseases: National Impact, Costs and Solution, 2003." *National Alliance for Nutrition and Activity* 4 (2003): 10.

¹⁰⁴ Ibid.

¹⁰⁵ Nina Owcharenko and Robert E. Moffit, "How the President's Health Care Plan?" *Heritage Foundation, Health Care News*, The Heartland Institute , May 1, 2003; available from <<http://heartland.org/>>; Internet; accessed 8 December 2004 .

¹⁰⁶ Ibid.

¹⁰⁷ Ibid. Carriers that write policies for small businesses tend to charge very high premiums. Often, they demand extensive medical information about each employee. If anyone in the group has a pre-existing condition, the carrier may refuse to write a policy or if someone in the company becomes seriously ill, the carrier may cancel the policy next time it comes up for renewal.

¹⁰⁸ U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, June 2002; available from <http://www.cms.hhs.gov/charts/series/sec1>; Internet; accessed 10 Dec 2004

¹⁰⁹ Christian Parenti, "U.S. Healthcare: The Free Choice to Suck," 27 June 2003; available from <<http://www.alternet.org/>>; Internet; accessed 10 December 2004.

¹¹⁰ Nina Owcharenko and Robert E. Moffit.

¹¹¹ In an ABC/Washington Post poll last fall, 79 percent of respondents said that it was more important for the government to provide health care coverage for all Americans than it was

to hold down taxes. The same poll found that 62 percent of respondents favored a universal government health insurance program financed by taxpayers.

¹¹² Pew Research Center for the People & the Press, "2003 Values Update Survey," 7 August 2003; available from <<http://www.people-press.org/reports/print.php3?PageID=731>>; Internet; accessed 10 December 2004.

¹¹³ According to recent medical studies, coronary heart disease, lung cancer and obesity reduce the life expectancy of Americans and cost the most for treating - all three of which can be significantly reduced by simple lifestyle changes.

¹¹⁴ Ibid.

¹¹⁵ Christian Parenti, "U.S. Healthcare: The Free Choice to Suck."

¹¹⁶ Ibid.

¹¹⁷ In 1999, C.A. Heimbolt of Bristol Myers-Squibb made \$168 million; J.A. Stafford of Wyeth made \$116.3 million; while W.C. Steere of Pfizer made a mere \$28.8 million. In addition, in 2000, W.C. Steere's pay increased to \$40 million.

¹¹⁸ Entrepreneur.COM, "Establishing a Health Plan," 12 July 2002; available from <http://www.entrepreneur.com/article/0_4621,301327,00.html>; Internet; accessed 14 December 2004.

¹¹⁹ Spencer Swalm, "Making Sense of Health Care's Alphabet Soup," *Business Journal News Service* (June 2003): 5.

¹²⁰ Ibid.

¹²¹ Patricia M. Barnes, "Complementary and Alternative Medicine Use Among Adults in the United States - 2002," *Advance Data from Vital and Health Statistics*, no 343 (May 2004) US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. "The U.S. public's use of CAM increased substantially during the 1990s. This high rate of use translates into large out-of-pocket expenditures on CAM. It has been estimated that the U.S. public spent between \$36 billion and \$47 billion on CAM therapies in 1997. Of this amount, between \$12.2 billion and \$19.6 billion was paid out-of-pocket for the services of professional CAM health care providers such as chiropractors, acupuncturists, and massage therapists. These fees are more than the U.S. public paid out-of-pocket for all hospitalizations in 1997 and about half that paid for all out-of-pocket physician services. Explanations for this growth in CAM use have been proposed, including marketing forces, availability of information on the Internet, the desire of patients to be actively involved with medical decision making, and dissatisfaction with conventional (western) medicine. This dissatisfaction may be related to the inability of conventional medicine to adequately treat many chronic diseases and their symptoms such as debilitating pain. Rates of CAM use are also exceptionally high among individuals with life threatening illnesses such as cancer or HIV. It appears that the majority of people use CAM as a complement to conventional medicine, not as an alternative.

"As used by the U.S. public, CAM consists of many heterogeneous systems of medicine as well as numerous stand-alone therapies. Several systems of CAM are practiced as part of the health care system in U.S. immigrants' countries of origin. For example, Ayurveda is practiced in India at a national level within the Federal health system. Traditional Chinese medicine, which includes acupuncture, acupressure, herbal medicine, tai chi, and qi gong, is often practiced in the same hospitals or clinics as conventional medicine in China. Kampo, the system of traditional herbal medicine in Japan, is covered by the national health insurance plan and is practiced by many medical doctors. Immigrants from these and other countries of origin may continue to rely on CAM as part of their medical treatment in the United States even as they seek care from conventional health care providers. Some of these systems may eventually prove to be low cost health care options for use by the U.S. public."

Barnes additionally states:

"Despite the diverse ways in which these systems and therapies developed, they appear to have several characteristics in common: the use of complex interventions, often involving the administration of many medications or medicinal substances at the same time; individualized diagnosis and treatment of patients; an emphasis on maximizing the body's inherent healing ability; and treatment of the "whole" person by addressing their physical, mental, and spiritual attributes rather than focusing on a specific pathogenic process as emphasized in conventional medicine. Notwithstanding the growing scientific evidence that some CAM therapies may be effective for specific conditions, the public's wide use of many untested CAM therapies might have unanticipated negative consequences. For example, the U.S. Department of Health and Human Services banned the sale of the herbal supplement ephedra in 2003 after concluding that the risks associated with use of this product by the general public greatly outweighed any potential benefit. It has been found that other herbal products interact or interfere with the normal pharmacology of some pharmaceutical drugs with potentially fatal consequences. CAM users often do not share information about such use with their conventional health care providers, thereby increasing the possibility of serious interactions. Even when conventional health care providers are aware that their patients are taking herbal products, serious interactions could result if providers are unfamiliar with the scientific literature on CAM. Understanding the prevalence and reasons for CAM use is a first step toward improving communication between health care providers and their patients."

See also Rob Stein, "Alternative Remedies Gaining Popularity, Majority in U.S. try Some Form," *The Washington Post*, 28 May 2004, sec 1A, p. 2. "A new government survey of more than 31,000 U.S. adults nationwide, the most comprehensive assessment of the use of alternative medicine in the United States, found that 36 percent are using some kind of "complementary and alternative" therapy. That number jumps to 62 percent when prayer is included. . . . A majority of people -- 55 percent -- combine alternative treatments with conventional medicine, but 13 percent try them because they think conventional medicine is too expensive, and 28 percent -- more than in earlier surveys -- believe conventional medical treatments will not help their health problems. . . . The survey, conducted by the Federal Centers for Disease Control and Prevention's National Center for Health Statistics, confirms earlier, much smaller studies, which found that the popularity of alternative therapies was rapidly rising. The new findings provide much more detail than ever before and indicate that trend was continuing unabated. . . . The survey, conducted in 2002, included questions on 27 types of alternative therapies commonly used in the United States, including 10 types provided by such practitioners as acupuncturists and chiropractors and 17 others that people do on their own, such as herbal and botanical remedies, special diets, and megavitamins."

¹²² Ibid.

¹²³ "The Global Infectious Threat and Its Implications for the U.S.," *National Intelligence Council*, (January 2000): 4.

¹²⁴ U.S. Department of Health and Human Services, *Strategic Plan for FY 2004-2009*; available from <<http://aspe.hhs.gov/hhsplan/2004/intro.shtml>>; Internet; accessed 14 December 2004.

¹²⁵ Ibid.

¹²⁶ Ibid.

¹²⁷ Ibid.

¹²⁸ Todd Zwillich, "George W. Bush and John Kerry's Health-Care Plans," 14 October 2004; *WebMD Health*; available from <<http://my.webmd.com/content/article/95/103272.htm#q1>>; Internet; accessed 16 December 2004.

- **Presidents Bush's proposed plan** would cost \$90 billion over 10 years, covering 8 million uninsured. It includes the following features:
 - Tax credits: \$1000 individual and \$3000 family
 - Health Savings Accounts, non taxable
 - Prescription drug coverage that enables seniors to get the medicines they need, without the government dictating their drug choices.
 - Choice of an individual health care plan with full coverage for disease prevention such as screenings for cancer, diabetes and osteoporosis.
 - Increased funding for children and single parent programs
 - Improvements in health care quality and patient safety through litigation reform and standards.
- **Senator Kerry's proposed plan** would cost \$650 billion over 10 years covering 27 million uninsured. Features include:
 - Federal rebates/tax credits to employers providing healthcare savings to their employees
 - Bring down prescription drug costs by taking away middle management profit, close loopholes preventing cheaper meds, give Medicaid more leverage in negotiating drug prices
 - Reduce malpractice costs by initiating lawsuit specialty gatekeeper, sanctions on frivolous suits, limit awards of punitive damages

- “Quality bonus” for low medical error rates: between 44,000 and 98,000 die of medical errors every year
- “Technology bonus” for incorporation of cost cutting IM/IT
- Kerry’s ‘New Deal’: Health coverage for every child, working and single parents
- Federal Employee’s Health Benefits Plan for everybody

¹²⁹ Jonathan Weisman, “Sick About Health Care, Employers and Politicians Struggle to Find Solution,” *The Washington Post*, 26 May 2004, sec E, p. 3.

¹³⁰ Clinton.

¹³¹ Foundation for Accountability - FACCT, “Innovators and Visionaries: Strategies for Creating a Person-centered Health System,” September 2003; available from <<http://www.facct.org>; Internet>; accessed 14 December 2004.

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